

Purple Gallinule (*Porphyrio martinica*)

Conservation Concern Category:
High Concern

Population Trend (PT)

Stable (Delany and Scott 2002; Canevari 1993)

“recently colonized Coiba Is in Panama due to great expansion of rice cultivation there...populations are probably decreasing throughout the bird’s range as a result of freshwater wetland loss in the US and throughout South and Central America...” (Taylor 1998)

“has apparently increased wherever rice is cultivated...the BBS provides no useful information because insufficient numbers encountered...” (West and Hess 2002)

“populations are no longer increasing with rice cultivation because new varieties of rice now being cultivated that do not provide the same amount of nesting cover as did older rice varieties and populations seem to be declining in this habitat in Arizona and perhaps elsewhere...” (R. Russell, pers.comm.)

PT FACTOR SCORE=4

Population Size (PS)

100,000-1,000,000 total individuals (Delany and Scott 2002; Canevari 1993; WCA 2001 (Denver workshop))

“in the US it appears to be uncommon to relatively common...in Mexico it is a frequent to uncommon and local resident, more widespread in winter...in Puerto Rico it is now uncommon to rare over most of the coast but is regular at Cartagena Lagoon...it is rare and local in the lowlands of Guatamala...uncommon in Honduras...locally common throughout Costa Rica...fairly common to common in Panama...” (Taylor 1998)

“high densities found in rice fields (1.5 pair/ha in Louisiana)...” (West and Hess 2002)

“I suggest 10,000 - 100,000 unless you are including the unknowable South American population...” (R. West, pers.comm.)

PS FACTOR SCORE=2-3

Threats to Breeding Populations (TB)

“a few depredation permits allow birds to be shot in ricefields...birds have been destroyed by aerial

spraying with the pesticide endrin...predators include alligators and snapping turtles...” (Taylor 1998)

“severe drought and draining of favored bodies of water may be chief limiting factor...depredation permits...elevated levels of OCs in eggs but not correlated with lowered reproductive success...extensive wetland losses over breeding range somewhat offset by created habitats: rice fields, national wildlife refuges, water-conservation impoundments...species may have benefited from introduction of exotic aquatic plants...noted chiefly as traffic casualties in nw Florida...” (West and Hess 2002)

“a new threat is Purple Swamphen introduction in s. Florida—potential predator of PUGA chicks...loss of Louisiana NWR impoundments may be a critical habitat loss as they support a significant concentration of breeding PUGA...” (R. West, pers.comm.)

TB FACTOR SCORE=4

Threats to Non-breeding Populations (TN)

“nocturnally migrating PUGA at much higher risk of collision than diurnally migrating ducks and geese (television towers, oil rigs—attracted by lights)...” (West and Hess 2002)

Significant potential threats estimated (Marshbird Workshop 2005)

TN FACTOR SCORE=4

Global Range (Taylor 1998; inset=plan area range)



Breeding Distribution (BD)

E USA, Caribbean, Central America, South America S to N Argentina (Delany and Scott 2002)

“accompanying map greatly exaggerates distribution of species inland from the coastal plain. Species is a highly localized breeder in SE Missouri, S Illinois, and Tennessee...” (R. Russell, pers.comm.)

“90% of the US birds breed within 50 miles of the Gulf Coast; 99% within 100 miles... the big southeastern range on the map hold few breeding pairs and over estimation of their population has resulted...” (R. West, pers.comm.)

2,629,700 km² (plan area distribution; estimated from range maps)

BD FACTOR SCORE=3

Non-breeding Distribution (ND)

E USA, Caribbean, Central America, South America S to N Argentina (Delany and Scott 2002)

2,629,700 km² (plan area distribution; estimated from range maps)

ND FACTOR SCORE=4

Literature Cited:

- Delany, S. and S. Scott. 2002. *Waterbird Population Estimates – Third Edition. Wetlands International Global Series No. 12*, Wageningen, The Netherlands. Pp: 131
- Taylor, B. 1998. American Purple Gallinule. *In Rails: A guide to the Rails, Crakes, Gallinules and Coots of the World*. Yale University Press, New Haven. Pp: 482
- West, R.L. and Hess, G.K. 2002. Purple Gallinule (*Porphyryla martinica*). *In The Birds Of North America*, No.626 (A.Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Additional References:

- Helm, R. N. 1994. Purple gallinule. *In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America*. Allen Press, Lawrence, Kansas.